

AMENDMENTS TO THE CLAIMS:

Claim 1. (canceled):

2. (previously presented): The detection device according to claim 7, wherein the correlation value obtaining unit performs a despreading process by shifting a phase of the code, and the detection unit detects a phase of the code in a case where the correlation value is a maximum or greater than a reference value, as a despreading timing.

3. (previously presented): The detection device according to claim 7 wherein the correlation value obtaining unit includes a matched filter.

4. (previously presented): The detection device according to claim 7 wherein the correlation value obtaining unit includes a sliding correlator.

5. (previously presented): The detection device according to claim 7 wherein the correlation value obtaining unit includes a matched filter to be used in a case where the length of code is short or part of the code is used, and a sliding correlator to be used in a case where the length of the code is long.

6. (previously presented): The detection device according to claim 2 wherein the correlation value obtaining unit includes a matched filter to be used in a case where the length of a code is short or part of the code is used, and a sliding correlator to be used in a case where the length of the code is long.

7. (currently amended): A detection device comprising:

a storage unit storing a transmitted signal in a demodulator of a direct sequence CDMA signal;

a code generation unit sequentially generating ~~codes~~ a single code from a plurality of candidate codes for a candidate for a despreading code;

a correlation value obtaining unit reading repeatedly the signal stored in the storage unit to be despread by the code; and

a detection unit detecting the code from among the plurality of candidate codes generated by the code generation unit, used for the despreading process as a spreading code on a transmission side, in a case where the correlation value obtained by the correlation value obtaining unit is a maximum or greater than a reference value,

wherein the detection ~~device~~ unit comprises an adder, a memory unit storing an output from the adder, and a feedback path feeding back an output from the memory unit to the adder, and the correlation values obtained by the correlation value obtaining unit are totaled for a plurality ~~by~~ of symbols.

8. (original): The detection device according to claim 7 wherein one memory is used as the storage means and the memory means.

9. (currently amended): A detection method of detecting a spreading code and a despreading timing in a demodulator of a direct sequence CDMA signal comprising:

(a) storing a transmitted signal;

(b) sequentially generating a single code from a plurality of candidate codes to be a candidate for a despreading code;

(c) reading the signal stored in the step (a) to be despread by the code; ~~and~~

(d) returning to the step (a) until all of the plurality of candidate codes have been generated by the step (b), and

~~(d)~~ (e) detecting the code from among candidate codes generated by the step (b), used for the despreading process as a spreading code on a transmission side, in a case where the correlation value obtained in the step (c) is a maximum or greater than a reference value,

wherein the step ~~(d)~~ (e) is executed using an adder, a memory storing an output from the adder, and a feedback path feeding back an output from the memory to the adder and wherein the correlation values obtained in the step (c) are totaled for a plurality of symbols.

10. (currently amended): The detection method according to claim 9 wherein step (c) comprises a step of performing a ~~despreading~~ despreading process by shifting a phase of the code, and step (d) comprises a step of detecting a phase of the code as a ~~despreading~~ despreading code in a case where the correlation value is a maximum or greater than a reference value.

11. (original): The detection method according to claim 9 wherein step (d) comprises a step of totaling the correlation values obtained in step (c) for a plurality of symbols.

12. (currently amended): A detection device comprising:

a storage unit storing a transmitted signal in spread spectrum communication;

a code generation unit sequentially generating a single code from a plurality of candidate codes to be a candidate for a despreading code;

a correlation value obtaining unit reading repeatedly the signal stored in the storage unit to be despread by the code by shifting a phase of the code; and

a detection unit detecting the code from among the plurality of candidate codes generated by the code generation unit as despreading code and a phase of the code used for the despreading process as a spreading code, in a case where the correlation value obtained by the correlation value obtaining unit is a maximum or greater than a reference value,

wherein the detection ~~device~~ unit comprises an adder, a memory storing an output from the adder, and a feedback path feeding back an output from the memory to the adder, and the correlation values obtained by the correlation value obtaining unit are totaled for a plurality of symbols.

cl
Concl